wherein each of the source and the drain regions [have at least one] has a portion containing one or more elements selected from the group consisting of carbon, nitrogen, and oxygen at a concentration of 1 x 10^{19} atoms/cm^3 or more, and

wherein said channel region contains boron at a concentration of from 1 x 10^{15} to 5 x 10^{17} atoms/cm^3.

82. (Amended) A device according to claim 78 wherein [said channel region comprises boron at a concentration of from 1 x 10^{15} to 5 x 10^{17} atoms/cm^3] a threshold voltage of said n-channel TFT is approximately equivalent to that of p-channel TFTs.

84.(Amended) A semiconductor device for electro-optical device comprising a CMOS device comprising n-channel and p-channel TFTs, each of said n-channel and p-channel TFTs comprising:

a semiconductor layer comprising at least a channel region and source and drain regions with said channel region interposed therebetween; and

a gate electrode adjacent to said channel region with a gate insulating film interposed therebetween,

wherein each of the source and the drain regions [have at least one] has a portion containing carbon at a concentration of 1 x 10^{19} atoms/cm^3 or more, and

wherein said channel region contains boron at a concentration of from 1 x 10^{15} to 5 x 10^{17} atoms/cm^3.

88. (Amended) A device according to claim 84 wherein [said channel region comprises boron at a concentration of from 1 x 10^{15} to 5 x 10^{17} atoms/cm^3] a threshold voltage of said n-channel TFT is approximately equivalent to that of p-channel TFTs.

90. (Amended) A semiconductor device for electro-optical device comprising a CMOS device comprising n-channel and p-channel TFTs, each of said n-channel and p-channel TFTs comprising:

a semiconductor layer comprising at least a channel region and source and drain regions with said channel region interposed therebetween; and

a gate electrode adjacent to said channel region with a gate insulating film interposed therebetween,

wherein each of the source and the drain regions [have at least one] has a portion containing nitrogen at a concentration of 1 x 10^{19} atoms/cm^3 or more, and

wherein said channel region contains boron at a concentration of from 1 x 10^{15} to 5 x 10^{17} atoms/cm^3.

94. (Amended) A device according to claim 90 wherein [said channel region comprises boron at a concentration of from 1 x 10^{15} to 5 x 10^{17} atoms/cm^3] a threshold voltage of said n-channel TFT is approximately equivalent to that of p-channel TFTs..

96. (Amended) A semiconductor device for electro-optical device comprising a CMOS device comprising n-channel and p-channel TFTs, each of said n-channel and p-channel TFTs comprising:

a semiconductor layer comprising at least a channel region and source and drain regions with said channel region interposed therebetween; and

a gate electrode adjacent to said channel region with a gate insulating film interposed therebetween,

wherein each of the source and the drain regions [have at least one] has a portion containing oxygen at a concentration of 1 x 10^{19} atoms/cm^3 or more, and

wherein said channel region contains boron at a concentration of from 1 x 10^{15} to 5 x 10^{17} atoms/cm^3.

100. (Amended) A device according to claim 96 wherein [said channel region comprises boron at a concentration of from 1 x 10^{15} to 5 x 10^{17} atoms/cm^3] a threshold voltage of said n-channel TFT is approximately equivalent to that of p-channel TFTs.

102. (Amended) A semiconductor device for electro-optical device comprising:

a semiconductor layer comprising at least a channel region and source and drain regions with said channel region interposed therebetween; and

a gate electrode adjacent to said channel region with a gate insulating film interposed therebetween,

wherein said channel region has at least [one portion] two portions containing one or more elements selected from the group consisting of carbon, nitrogen, and oxygen at a concentration of 1×10^{19} atoms/cm^3 or more, and

wherein said channel region contains boron at a concentration of from 1×10^{15} to 5×10^{17} atoms/cm^3.

108. (Amended) A device according to claim [102] 103 wherein [said channel region comprises boron at a concentration of from 1×10^{15} to 5×10^{17} atoms/cm^3] a threshold voltage of said n-channel TFT is approximately equivalent to that of p-channel TFTs.

109. (Amended) A device according to claim 102 wherein each of said [portion] portions is located adjacent to a boundary between the source and the channel regions or a boundary between the drain and the channel regions.

110. (Amended) A semiconductor device for electro-optical device comprising:

a semiconductor layer comprising at least a channel region and source and drain regions with said channel region interposed therebetween; and

a gate electrode adjacent to said channel region with a gate insulating film interposed therebetween,

wherein said channel region has at least [one portion] two portions containing carbon at a concentration of 1×10^{19} atoms/cm^3 or more, and

wherein said channel region contains boron at a concentration of from 1×10^{15} to 5×10^{17} atoms/cm^3.

116. (Amended) A device according to claim [110] 111 wherein [said channel region comprises boron at a concentration of from 1 x 10^{15} to 5 x 10^{17} atoms/cm^3] a threshold voltage of said n-channel TFT is approximately equivalent to that of p-channel TFTs.

117. (Amended) A device according to claim 110 wherein each of said [portion] portions is located adjacent to a boundary between the source and the channel regions or a boundary between the drain and the channel regions.

118. (Amended) A semiconductor device for electro-optical device comprising:

a semiconductor layer comprising at least a channel region and source and drain regions with said channel region interposed therebetween; and

a gate electrode adjacent to said channel region with a gate insulating film interposed therebetween,

wherein said channel region has at least [one portion] two portions containing nitrogen at a concentration of 1 x 10^{19} atoms/cm^3 or more, and

wherein said channel region contains boron at a concentration of from 1 x 10^{15} to 5 x 10^{17} atoms/cm^3.

124. (Amended) A device according to claim [118] 119 wherein [said channel region comprises boron at a concentration of from 1 x 10^{15} to 5 x 10^{17} atoms/cm^3] a threshold voltage of said n-channel TFT is approximately equivalent to that of p-channel TFTs.

125. (Amended) A device according to claim 118 wherein each of said [portion] portions is located adjacent to a boundary between the source and the channel regions or a boundary between the drain and the channel regions.

126. (Amended) A semiconductor device for electro-optical device comprising:

a semiconductor layer comprising at least a channel region and source and drain regions with said channel region interposed therebetween; and

a gate electrode adjacent to said channel region with a gate insulating film interposed therebetween,

G12

wherein said channel region has at least [one portion] two portions containing oxygen at a concentration of 1 x 10^{19} atoms/cm^3 or more, and

wherein said channel region contains boron at a concentration of from 1 x 10^{15} to 5 x 10^{17} atoms/cm^3.

Sub 135

132. (Amended) A device according to claim [126] 127 wherein [said channel region comprises boron at a concentration of from 1 x 10^{15} to 5 x 10^{17} atoms/cm^3] a threshold voltage of said n-channel TFT is approximately equivalent to that of p-channel TFTs.

G13

133. (Amended) A device according to claim 126 wherein each of said [portion] portions is located adjacent to a boundary between the source and the channel regions or a boundary between the drain and the channel regions.

134. (Amended) A semiconductor device for electro-optical device comprising:

a semiconductor layer comprising at least a channel region and source and drain regions with said channel region interposed therebetween;

a gate electrode adjacent to said channel region with a gate insulating film interposed therebetween;

a first interlayer insulating film over said semiconductor layer and said gate electrode, said first interlayer insulating film comprising inorganic material;

a second interlayer insulating film on said first interlayer insulating film, said second interlayer insulating film comprising organic resin; and

a pixel electrode on said second interlayer insulating film,

wherein each of the source and the drain regions [have at least one] has a portion containing one or more elements selected from the group consisting of carbon, nitrogen, and oxygen at a concentration of 1 x 10^{19} atoms/cm^3 or more, and

G13

wherein said channel region contains boron at a concentration of from 1 x 10^{15} to 5 x 10^{17} atoms/cm^3.

138. (Amended) A device according to claim 134 wherein said [channel region comprises boron at a concentration of from 1 x 10^{15} to 5 x 10^{17} atoms/cm^3] gate electrode comprises a silicon film containing phosphorus, a multilayer film comprising silicon and molybdenum, or a multilayer film comprising silicon and tungsten.

G14

139

140. (Amended) A semiconductor device for electro-optical device comprising:

a semiconductor layer comprising at least a channel region and source and drain regions with said channel region interposed therebetween;

a gate electrode adjacent to said channel region with a gate insulating film interposed therebetween;

G15

a first interlayer insulating film over said semiconductor layer and said gate electrode, said first interlayer insulating film comprising inorganic material;

a second interlayer insulating film on said first interlayer insulating film, said second interlayer insulating film comprising organic resin; and

a pixel electrode on said second interlayer insulating film,

wherein each of the source and the drain regions [have at least one] has a portion containing carbon at a concentration of 1 x 10^{19} atoms/cm^3 or more, and

wherein said channel region contains boron at a concentration of from 1 x 10^{15} to 5 x 10^{17} atoms/cm^3.

144. (Amended) A device according to claim 140 wherein said [channel region comprises boron at a concentration of from 1 x 10^{15} to 5 x 10^{17} atoms/cm^3] gate electrode comprises a silicon film containing phosphorus, a multilayer film comprising silicon and molybdenum, or a multilayer film comprising silicon and tungsten.

G16

146. (Amended) A semiconductor device for electro-optical device comprising:

a semiconductor layer comprising at least a channel region and source and drain regions with said channel region interposed therebetween;

a gate electrode adjacent to said channel region with a gate insulating film interposed therebetween;

a first interlayer insulating film over said semiconductor layer and said gate electrode, said first interlayer insulating film comprising inorganic material;

a second interlayer insulating film on said first interlayer insulating film, said second interlayer insulating film comprising organic resin; and

a pixel electrode on said second interlayer insulating film,

wherein each of the source and the drain regions [have at least one] has a portion containing nitrogen at a concentration of 1×10^{19} atoms/cm^3 or more, and

wherein said channel region contains boron at a concentration of from 1×10^{15} to 5×10^{17} atoms/cm^3.

150. (Amended) A device according to claim 146 wherein said [channel region comprises boron at a concentration of from 1×10^{15} to 5×10^{17} atoms/cm^3] gate electrode comprises a silicon film containing phosphorus, a multilayer film comprising silicon and molybdenum, or a multilayer film comprising silicon and tungsten.

152. (Amended) A semiconductor device for electro-optical device comprising:

a semiconductor layer comprising at least a channel region and source and drain regions with said channel region interposed therebetween;

a gate electrode adjacent to said channel region with a gate insulating film interposed therebetween;

a first interlayer insulating film over said semiconductor layer and said gate electrode, said first interlayer insulating film comprising inorganic material;

a second interlayer insulating film on said first interlayer insulating film, said second interlayer insulating film comprising organic resin; and